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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/470,155	12/22/1999	Naiyong Jing	55235USA2A	5837

32692 7590 07/02/2003

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EXAMINER
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CHEN, VIVIAN

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 07/02/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/470,155	JING, NAIYONG	
	Examiner	Art Unit	
	Vivian Chen	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) 8,9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input checked="" type="checkbox"/> Other: <u>ATTACHMENTS 1, 2</u>       |

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**DETAILED ACTION**

1. Claims 2, 12-28 have been cancelled.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/14/2003 has been entered.

***Specification***

3. The amendment filed 4/14/2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the newly added claim limitation requiring a polyimide which is thermoplastic.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 3-6, 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention for the reasons stated above in the objection under 35 U.S.C. 132 to the amendment filed 4/14/2003.

***Claim Rejections - 35 USC § 103***

6. Claims 1, 3-6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over TSE ET AL (US 5,227,426) for the reasons stated in paragraph 5 of the previous Office Action.

TSE ET AL disclose a curable adhesive composition comprising a thermoplastic olefin polymer with pendent functional groups such as carboxyl or amide, and catalysts such as tetrabutyl phosphonium bromide, crown ethers, and/or tetrabutyl ammonium hydroxide (columns 12-16, 23-24; lines 5-16, col. 30) as recited in claims 1, 3, 5-6, 10. However, the reference does not explicitly disclose the recited combination of a base and crown ether.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select an effective combination of known catalysts as curing agents and use a commercially available crown ether such as 18-crown-6 ether in the adhesive composition of TSE ET AL depending on the particular functional groups and base polymer used, and the curing properties, adhesive and processing characteristics required by a given application.

7. The rejection under 35 U.S.C. 103(a) based on KUBILLUS ET AL has been withdrawn in view of Applicant's amendments and arguments regarding thermoplastic non-fluorinated polymers.

***Response to Arguments***

8. Applicant's arguments filed 4/14/2003 have been fully considered but they are not persuasive.

(A) Applicant argues that TSE ET AL fails to disclose the claimed invention because in the claimed composition, the base and crown ether are incorporated into the polymer. In response to applicant's argument that the reference fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., base and crown ether being incorporated into the polymer; compositions produced by bulk reaction; etc.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 1 as presently amended simply requires that the base and crown ether is "mixed within" the non-fluorinated polymer. However, the term "mixed" implies that the resulting product is a "mixture" which is commonly interpreted as a composition "containing two or more substances that are not chemically united" (see attachment #1, THE CONDENSED CHEMICAL DICTIONARY) or "a composition of two or more substances not chemically bound to each other" (see attachment #2, WEBSTER'S II NEW RIVERSIDE UNIVERSITY DICTIONARY); therefore, the relied upon claim language "mixed

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within" does not require that the base and the crown ether be a part of or chemically bound to the non-fluorinated polymer. Furthermore, the specification does not provide any clear indication of the relied upon "incorporation" (i.e., chemical bonding) into the non-fluorinated polymer.

(B) Applicant argues that the crown ethers and bases in TSE ET AL are not present in the final product. However, TSE ET AL discloses the invention as presently claimed -- namely, a composition for adhesives which comprises a melt-processible, non-fluorinated polymer such as a functionalized polyolefin and a catalyst system containing a base and a crown ether. The fact that a portion of the catalyst system may be subsequently removed from the composition is irrelevant. Furthermore, since the present claims do not specify the amount of base and crown ether in the composition, even a residual amount of catalyst system components left after any isolation of the resulting polymeric composition would be sufficient to met the present claims. Applicant has not provided any probative evidence of criticality or unexpected results from the claimed composition or catalyst system which is commensurate in scope with the present claims.

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*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (703) 305-3551. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (for non-after finals) and (703) 872-9311 (for after-finals).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

June 27, 2003



Vivian Chen  
Primary Examiner  
Art Unit 1773